

**NATIONAL COASTAL ASSESSMENT
2005**

**BENTHIC COMMUNITY CONDITION
IN MARYLAND'S ESTUARIES**

Prepared for

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FOREWORD

This document, *National Coastal Assessment 2005: Benthic Community Condition in Maryland's Estuaries*, was prepared by Versar, Inc., at the request of Ms. Cathy Wazniak of the Maryland Department of Natural Resources under Contract # RAT7/06-201 between Versar, Inc. and the Maryland DNR. The report assesses the status of benthic communities in the Maryland's coastal bays and the Chesapeake Bay in support of the United States Environmental Protection Agency's National Coastal Assessment Program.

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1.0 INTRODUCTION

The National Coastal Assessment (NCA) Program, the continuation of the Coastal 2000 Project, is a component of the Environmental Monitoring and Assessment Program (EMAP). The National Coastal Assessment and EMAP are national research programs led by the Environmental Protection Agency's Office of Research and Development (EPA-ORD). NCA/EMAP are intended to develop the scientific tools and agency partnerships needed to broadly assess the status and trends of significant ecological systems. The goal of EMAP is to "monitor the condition of the Nation's ecological resources to evaluate the cumulative success of current policies and programs and to identify emerging problems before they become widespread or irreversible."

The Maryland Department of Natural Resources (DNR) has developed a Cooperative Agreement with the Environmental Protection Agency (EPA) to join collaboratively in the National Coastal Assessment Program to assess the coastal waters and estuaries of the United States. As the lead agency for the state of Maryland, DNR conducted a study in August 2005 to assess water quality, sediment quality, and the quality of biological resources in the Maryland's coastal bays and the Chesapeake Bay. This document presents the results of the benthic portion of the study, an assessment of the condition of the bottom invertebrate communities.

2.0 METHODS

2.1 SAMPLE COLLECTION

Benthic samples were collected at 21 sites in the Maryland coastal bays August 2-4, and at 18 sites in Chesapeake Bay August 29-September 30, 2005. Sampling in the Chesapeake Bay was conducted in coordination with the Chesapeake Bay Long-term Benthic Monitoring Program (LTB), and shared common stations and sampling platforms.

Six sites in the Maryland coastal bays (Figure 1) and 19 sites in the Chesapeake Bay (Figure 2) were NCA sites new this year. The remaining of the sites were established previously: Three National Park Service water quality monitoring sites, seven *Pfesteria* monitoring sites, and five National Coastal Assessment sites sampled in 2004 (Figure 1). One Chesapeake Bay site (MD05-0006) could not be sampled because the target and alternate locations were within the restricted zone of the Aberdeen proving grounds. Most sites were sampled at the target "A" location, but five sites were sampled at alternate locations. Of these five sites, four sites in Chesapeake Bay (MD05-0003, 0009, 0015, and 0018) were sampled at the alternate "B" location because their target locations were on hard bottom, shallow water, the Aberdeen proving grounds, and a ship terminal, respectively. One site in the Maryland coastal bays (MD05-0007) could not be sampled because of accessibility and safety concerns. This site was located in close proximity to a shoal that borders a very busy thoroughfare in lower Isle of Wight Bay. Our closest

approach in very shallow water still positioned us 50 feet from the station. Passing boats created wakes that were breaking upon the shoal, thereby making sampling unsafe. The first alternate location (MDALT-0052) in the list of station locations provided by EPA was selected and sampled the next day. Note that "B" and "C" locations were not available from EPA at the time of sampling in the Maryland coastal bays (early August 2005). This list became available later and used in the Chesapeake Bay to select alternate locations whenever the target "A" location could not be sampled. Two sites in the coastal bays (MD05-0031 and MD05-0034) were accessed by land because their approaches were too shallow; these locations have been sampled in like manner in previous years. Site designation and coordinates for all sampling locations are presented in Table 1.

Standardized methods were used in this project. While the field and laboratory procedures were consistent with the methods used by the NCA partners, an effort was made to obtain data that could be compared with historic and current monitoring efforts in Maryland's estuarine waters.

Benthic samples were collected with a Young Grab, which samples an area of 440 cm² to a depth of 10 cm. One benthic grab sample was collected at each site. Benthic samples were sieved through a 0.5-mm screen using an elutriative process, and the organisms retained on the screen were transferred to labeled jars and preserved in 10% buffered formalin stained with Rose Bengal (a vital stain used to aid separation of organisms from sediment and detritus). One sediment subsample for silt-clay analysis was collected from one additional grab sample from each site (for all sites), and 8 replicate sediment samples (~5 cm²) for chlorophyll *a* analysis were collected from four additional grab samples (coastal bays only).

Water quality measurements included water temperature, conductivity, salinity, dissolved oxygen concentration (DO), pH, Photosynthetically Active Radiation (PAR), and Secchi depth. Basic parameters were measured with a YSI 6600 Sonde and a 650 data logger near the surface of the water column (0.5 m) and at approximately 1 m intervals (including the 1.0 m mark) in the coastal bays, and near the surface (0.5 m) and bottom (~0.5 m off the bottom) in the Chesapeake Bay (consistent with LTB sampling protocols). PAR was measured immediately below the surface of the water column and at every 0.5 m thereafter (including the 1.0 m mark) using a LI-192SA Underwater Quantum Sensor and a LI-190SA Reference Sensor (LI-COR Corporation, Lincoln, Nebraska).

At the 24 NCA 2005 sites, additional sediment was collected for analysis of organic and metal contaminants, total organic carbon (TOC), and toxicity. At these sites, water samples were collected or filtered (250 ml, GFF filters) for nitrite, nitrate, ammonium, phosphate, total dissolved nitrogen, total dissolved phosphorus, chlorophyll *a*, and total suspended solids (TSS). Water samples were collected from near the surface (0.5 m), mid-depth, and near the bottom (0.5 m off the bottom) for nominal sites with depth > 2 m; near the surface and bottom for shallow sites (< 2 m), and at mid-depth only for very shallow sites (1 m or less). All contaminant, toxicity, and water samples were kept on ice in the dark while on board, and later refrigerated (toxicity) or frozen prior to shipping.

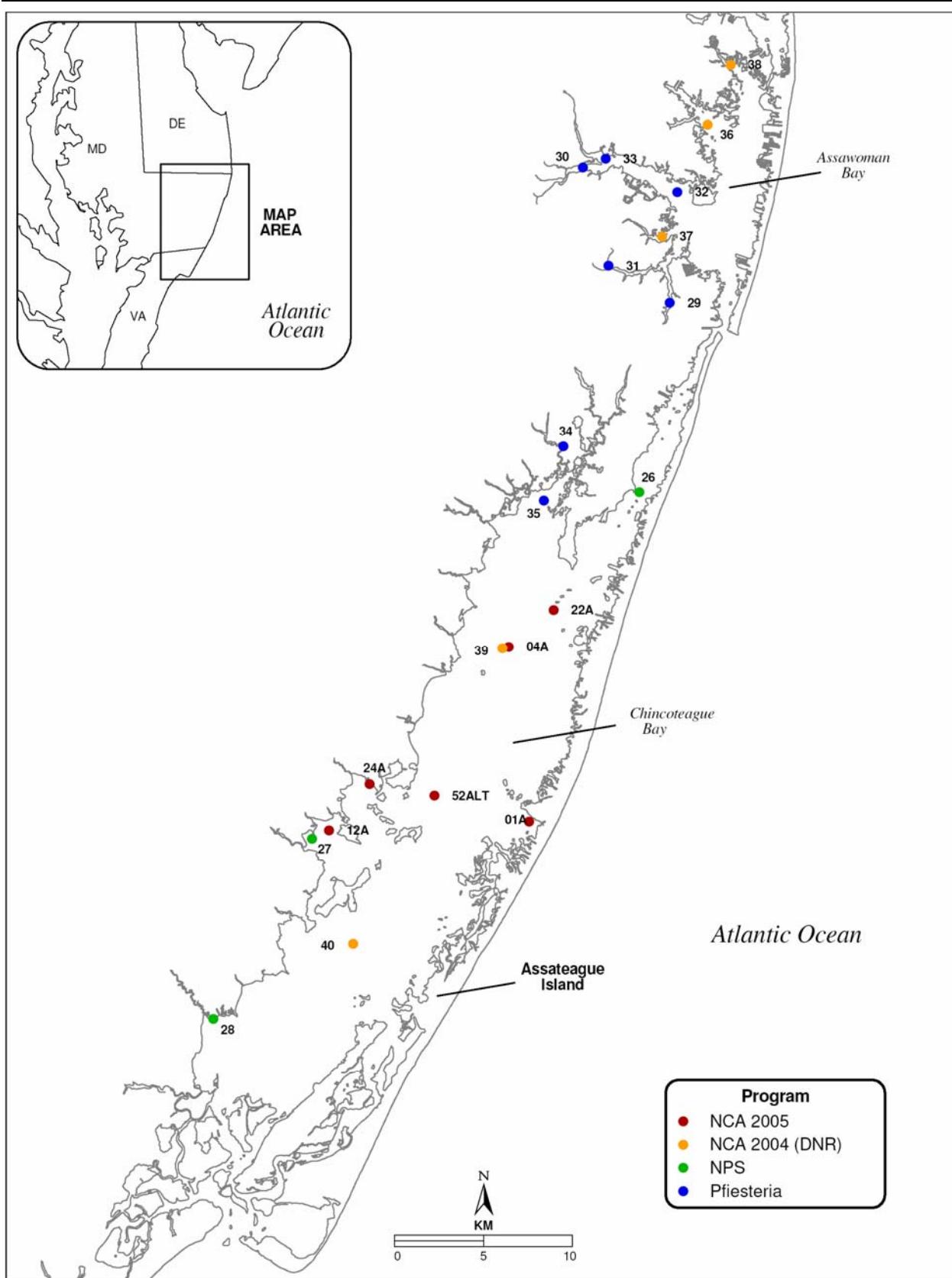


Figure 1. Location of the coastal bays sampling sites for 2005

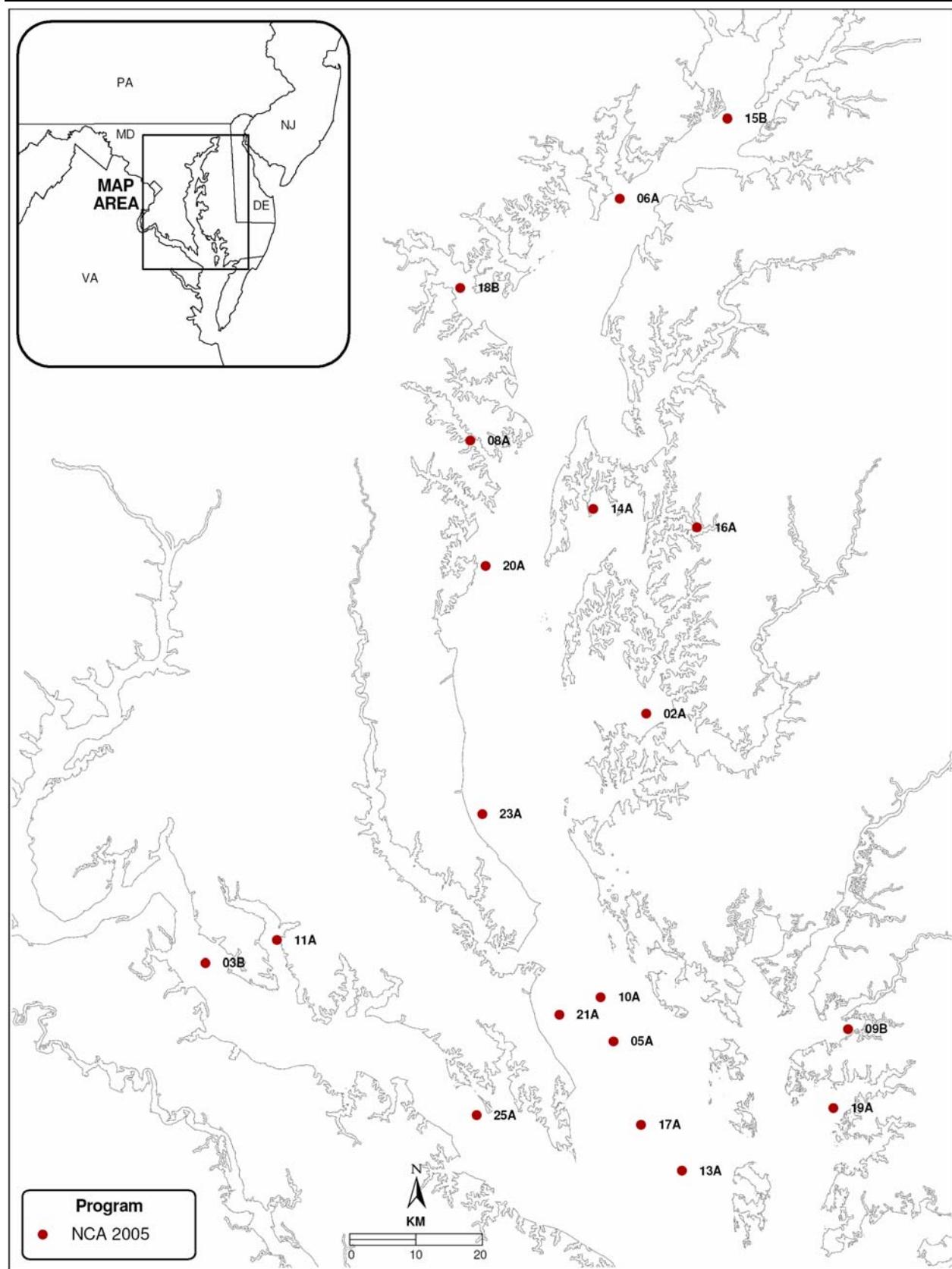


Figure 2. Location of Chesapeake Bay sampling sites for 2005

2.2 LABORATORY PROCESSING

Benthic organisms were sorted from detritus under dissecting microscopes, identified to the lowest practical taxonomic level, and counted. Oligochaete annelids from high salinity samples were identified to group level only. Anthozoans, nemerteans, and turbellarians were generally identified to group-level.

A voucher collection of rare and taxonomically problematic species initiated with the Coastal 2000 assessment is available upon request. Rare species are those for which there were no specimens, or only one specimen existed, in the permanent reference collections maintained at Versar or Cove Corporation. Taxonomically problematic species are those for which there was insufficient taxonomic information to resolve their classification with certainty.

Sand and silt-clay particles were separated by wet-sieving through a 63 micron stainless steel sieve and weighed using standard procedures described in Plumb (1981) and Buchanan (1984). Nutrient and benthic chlorophyll *a* analyses were conducted by the Chesapeake Biological Laboratory (CBL) following standard methods described in Strickland and Parsons (1972), the results delivered to Versar. Water column chlorophyll *a* analysis was conducted by the Maryland Department of Health and Mental Hygiene (DHMH) and the results were delivered directly to DNR. Contaminant and toxicity samples were shipped overnight to EPA Gulf Breeze Laboratory for analysis.

2.3 DATA ANALYSIS

Analyses were performed in the context of measures of benthic community condition used in a benthic index of biotic integrity (B-IBI) developed for the U.S. EPA Mid-Atlantic Integrated Assessment (MAIA) Program (Llansó et al. 2002). The MAIA region extends from the Delaware Bay estuary to Pamlico Sound. The MAIA benthic index is a multiple-attribute index designed to identify the degree to which a benthic assemblage deviates from expected reference (non-degraded) conditions. It integrates several benthic community attributes indicative of "health" into a single number that measures overall benthic community condition.

The MAIA benthic index was derived following procedures similar to those used during the development of the Chesapeake Bay B-IBI (Weisberg et al., 1997). Thresholds were established for each of several attributes as the 10th (or 90th, see below) and the 50th percentile values of the distribution of values at reference sites. This was done for each of five salinity habitats. For each attribute, a value from a new sample falling below the 10th percentile threshold (or above the 90th) was considered to deviate strongly from values at reference sites in similar habitats. An upper threshold corresponding to the 90th percentile was used for some attributes (e.g., percent abundance as pollution indicative taxa) because the direction of the response is such that higher percentages are expected in degraded sites than in reference sites. The index was validated using an independent data

set. Existing datasets from several federal and state sampling programs and multiple years were used to develop and validate the index. For details see Llansó et al. (2002).

Attributes of benthic community condition used in the MAIA benthic index are the following: abundance (number of individuals per m²), number of taxa, Shannon-Wiener diversity index (calculated with logarithms in base 2), percent dominance (100 minus the percent abundance contributed by the top two numerically dominant taxa), percent abundance as pollution indicative taxa, percent abundance as pollution sensitive taxa, percent abundance of deep-deposit feeders, percent abundance of Bivalvia, and the percent abundance ratio of Tanypodinae to Chironomidae. Epifaunal organisms, which usually respond differently to pollution than infauna (Ranasinghe et al. 1994), were excluded from the analysis (See Appendix for taxa marked as epifaunal).

One of the measures listed above, abundance, responds bimodally to stress; that is, the response can be greater than at reference sites with moderate degrees of stress, and less than at reference sites with high degrees of stress (Pearson and Rosenberg 1978). For this measure, an upper threshold corresponding to the 90th percentile value at reference sites was established in addition to the lower threshold corresponding to the 10th percentile (Weisberg et al., 1997). Values from samples falling above the upper threshold indicate moderate effects on benthos resulting in excess abundance in relation to organic enrichment. Values from samples falling below the lower threshold indicate depauperate benthic communities symptomatic of prolonged oxygen stress, toxic contamination, or other anthropogenic disturbance.

As with the Chesapeake Bay B-IBI, the MAIA benthic index is scaled from 1 to 5. Sites with values of 3 or more were considered to meet the goal, defined here as the observation of a benthic community that does not differ significantly from the reference (non-degraded) condition. Based on the MAIA benthic index, sites were classified into three levels. Sites with index values less than or equal to 2.0 were classified as severely degraded; sites with index values from 2.1 to 2.9 were classified as moderately degraded; and sites with index values of 3.0 or more were classified as meeting the goal.

3.0 RESULTS

For each of the 39 sites sampled in 2005, MAIA benthic index values are presented in Table 2 and the corresponding benthic community condition is presented in Figure 3 (coastal bays) and Figure 4 (Chesapeake Bay). Station specific water quality measurements and sediment composition are provided in Table 3. A complete list of species and their abundance is given in the Appendix and provided in electronic format. PAR, Secchi depth, chlorophyll and nutrient data are provided in electronic format separately from this report.

In Table 2, percent dominance is expressed as the percent abundance contributed by the top two numerically dominant taxa (rather than 100 minus this value). The

abundance of *Mediomastus* spp. and *Mediomastus ambiseta* were combined for metric and index calculations, because a majority of the *Mediomastus* individuals belong to the latter species. *Limnodrilus hoffmeisteri* and the Tubificidae immature without capilliform chaeta were likewise combined for metric and index calculations whenever these two designations co-occurred in a sample.

Of the 39 sites sampled in 2005, 26 sites exhibited healthy benthic communities (index score equal to or greater than 3.0) and 13 sites exhibited degraded benthos (index score < 3.0) (Table 2). Of the 13 sites that failed, 10 were classified as severely degraded (index score < 2.0) and 3 were classified as moderately degraded by the benthic index (index score between 2.1 and 3.0).

Severely degraded sites were depauperate, with generally very low abundance and species richness (Sites 0003B, 0021A, 0023A, 0030, 0031) or were azoic (Sites 0005A, 0010A, 0017A, 0018B, 0025A). Two severely degraded sites were located in the coastal bays (Figure 3) and eight, including all of the azoic sites, were located in Chesapeake Bay (Figure 4). The two severely degraded coastal bays sites, 0030 in upper St. Martin River and 0031 in upper Turville Creek, have been severely degraded in previous years. They did not exhibit hypoxic conditions in August 2005 but are prone to hypoxia and have exhibited low dissolved oxygen conditions in the past. The Chesapeake Bay sites were under the influence of heavy rains, high spring runoff, and widespread hypoxia in 2005.

Three of the Chesapeake Bay sites (0005A, 0010A, and 0017A) were located in the Maryland deep mainstem at depths >12 m. These areas are not sampled by LTB because they are considered permanently hypoxic and devoid of macrofauna. The results presented in this report confirm this assumption. All mainstem sites, including the three sites mentioned above plus sites 0021A and 0025A, had very low dissolved oxygen values near the bottom (Table 3), confirming a "dead zone" within Chesapeake Bay.

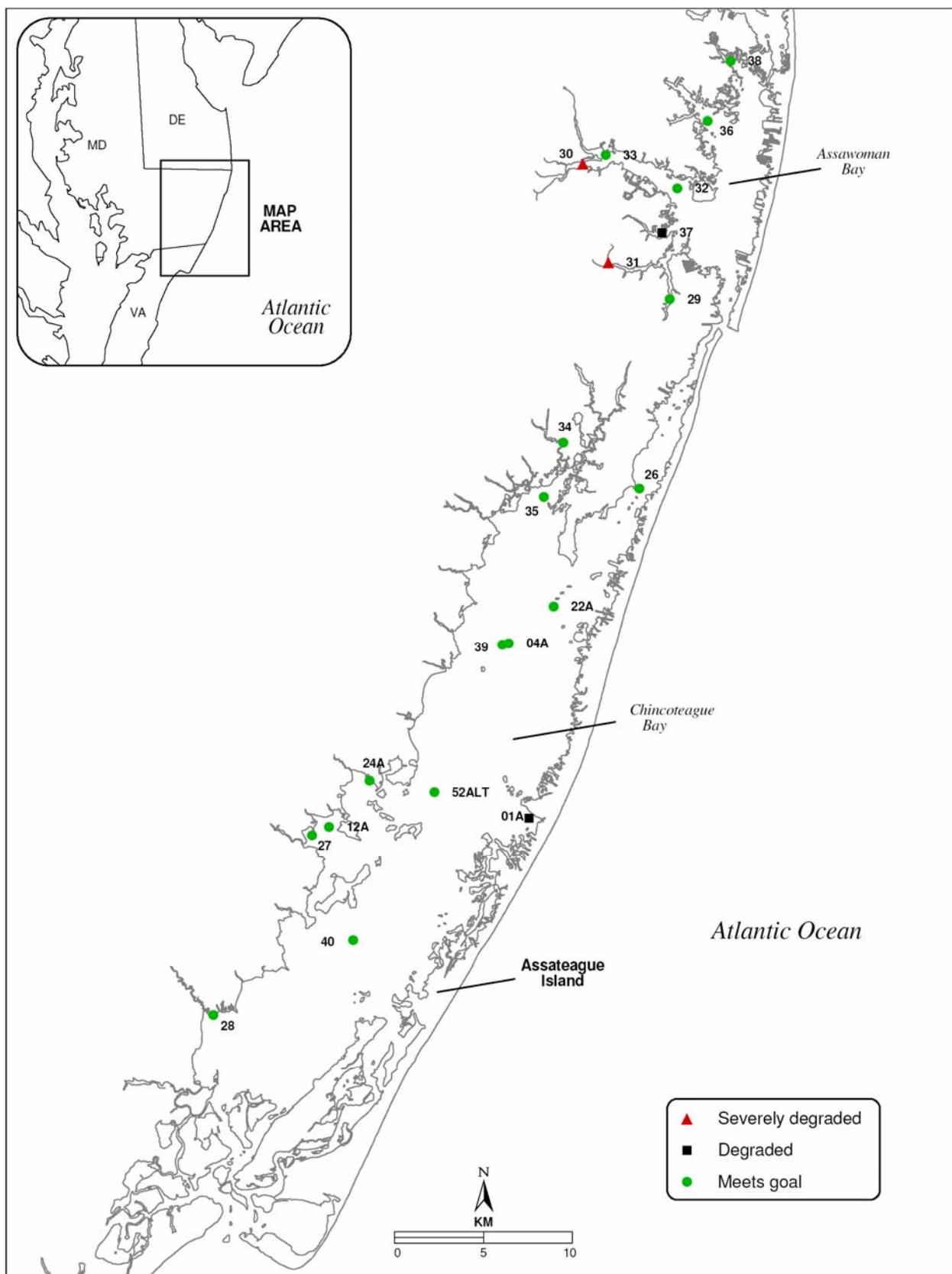


Figure 3. Benthic community condition at each of the August 2005 coastal bays sites

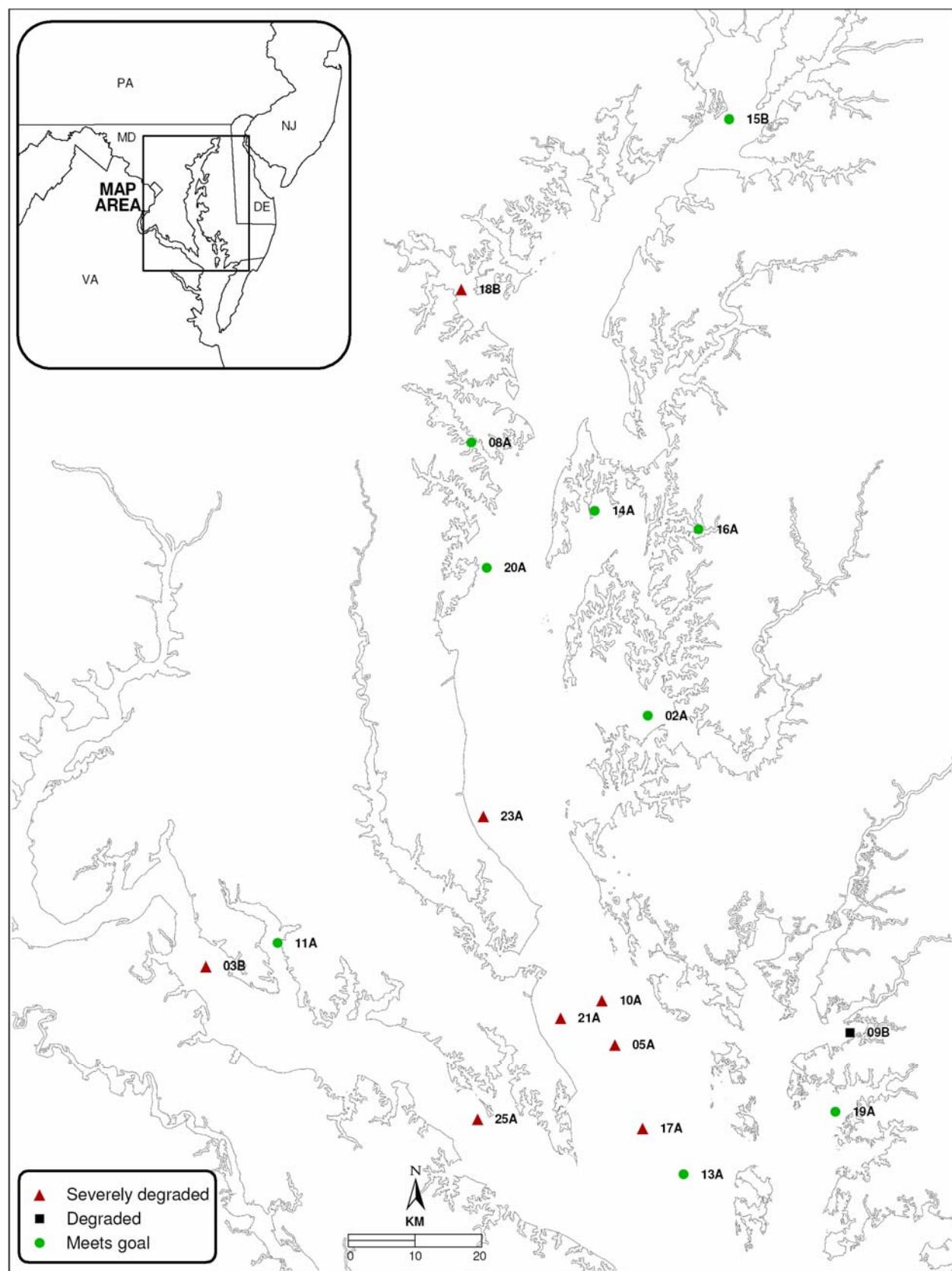


Figure 4. Benthic community condition at each of the Sept. 2005 Chesapeake Bay sites

Table 1. Sampling sites for 2005. ¹Not sampled; target coordinates given.

Program	Site # (this report)	Site # (DNR)	Latitude	Longitude
National Coastal Assessment 2005	MD05-0001A	-	38 4.944	-75 13.196
	MD05-0002A	-	38 38.33	-76 11.958
	MD05-0003B	-	38 18.316	-76 57.837
	MD05-0004A	-	38 10.148	-75 13.977
	MD05-0005A	-	38 12.022	-76 15.369
	MD05-0006 ¹	-	39 19.772	-76 14.730
	MD05-0008A	-	39 0.282	-76 30.269
	MD05-0009B	-	38 13.026	-75 50.977
	MD05-0010A	-	38 15.591	-76 16.702
	MD05-0011A	-	38 20.134	-76 50.398
	MD05-0012A	-	38 4.683	-75 20.91
	MD05-0013A	-	38 1.612	-76 8.247
	MD05-0014A	-	38 54.817	-76 17.474
	MD05-0015B	-	39 26.201	-76 3.515
	MD05-0016A	-	38 53.306	-76 6.688
	MD05-0017A	-	38 5.290	-76 12.502
	MD05-0018B	-	39 12.561	-76 31.325
	MD05-0019A	-	38 6.636	-75 52.493
	MD05-0020A	-	38 50.253	-76 28.687
	MD05-0021A	-	38 14.170	-76 20.997
	MD05-0022A	-	38 11.249	-75 12.248
	MD05-0023A	-	38 30.321	-76 29.019
	MD05-0024A	-	38 6.070	-75 19.343
	MD05-0025A	-	38 6.050	-76 29.625
	MD05-0052ALT	-	38 5.721	-75 16.844
National Park Service	MD05-0026	NPS-2	38 14.739	-75 8.939
	MD05-0027	NPS-7	38 4.441	-75 21.56
	MD05-0028	NPS-10	37 59.062	-75 25.371
<i>Pfiesteria</i>	MD05-0029	HEC0012	38 20.379	-75 7.766
	MD05-0030	SPR0009	38 24.428	-75 11.118
	MD05-0031	TUV0034	38 21.484	-75 10.128
	MD05-0032	XDN3724	38 23.696	-75 7.475
	MD05-0033	XDN4797	38 24.689	-75 10.238
	MD05-0034	NPC0012	38 16.116	-75 11.865
	MD05-0035	XCM4878	38 14.492	-75 12.618
National Coastal Assessment 2004	MD05-0036	XDN5737	38 25.705	-75 6.306
	MD05-0037	MKL0010	38 22.355	-75 8.065
	MD05-0038	XDN7545	38 27.480	-75 5.421
	MD05-0039	XCM0159	38 10.098	-75 14.217
	MD05-0040	XBM1301	38 1.298	-75 19.982

Table 2. MAIA B-IBI metric values and index scores. Blanks indicate metrics not applicable to the salinity habitat in which the station was classified, or correspond to measures for which percentages cannot be calculated. Salinity class definition: Poly = polyhaline (>18 psu); HM = high mesohaline (12-18 psu); LM = low mesohaline (5-12 psu); Oligo = oligohaline (0.5-5 psu).

Site	Abundance (#/m ²)	Shannon -Wiener	No. Taxa (#/ 0.044 m ²)	% Domi- nance	% Pollution Indicative	% Tany/ Chiron	% Bivalve	% Deep Feeding	Abun- dence	Shan Score	Taxa score	Domi- nance	Pollu- tion Score	Pollu- tion Score	Bival- ian Score	Deep MAIA Score	MAIA Index	Salin- ity Class
MD05-0001A	9977.2	3.00	19	43.28	12.07	9.79	.	0.91	32.57	1	3	3	.	.	3	.	2.5	Poly
MD05-0002A	522.7	2.11	5	60.87	4.35	43.48	4.35	43.48	4.35	1	3	1	5	5	.	.	3.0	LM
MD05-0003B	181.8	1.30	3	87.50	87.50	12.50	12.50	12.50	1	1	1	1	.	.	.	.	1.0	LM
MD05-0004A	8136.3	2.54	24	67.04	2.23	86.31	.	8.10	62.01	3	3	5	.	.	5	.	4.0	Poly
MD05-0005A	0.0	0.00	0	.	.	.	.	.	1	1	1	.	.	.	.	.	1.0	Poly
MD05-0008A	2022.7	2.82	9	44.94	22.47	2.25	.	8.99	33.71	5	5	3	5	5	1	.	3.8	HM
MD05-0009B	6681.8	0.55	8	94.90	93.54	3.06	.	2.38	93.88	3	1	3	1	3	.	.	2.2	HM
MD05-0010A	0.0	0.00	0	.	.	.	.	.	1	1	1	.	.	.	.	.	1.0	Poly
MD05-0011A	1227.3	2.28	6	59.26	38.89	33.33	.	16.67	22.22	3	3	1	5	3	.	.	3.0	LM
MD05-0012A	1500.0	3.41	15	36.36	13.64	42.42	.	19.70	33.33	5	5	3	.	.	5	.	4.5	Poly
MD05-0013A	522.7	2.94	9	39.13	21.74	39.13	.	0.00	4.35	1	5	3	5	5	.	.	3.8	HM
MD05-0014A	5113.6	2.76	14	52.89	43.11	4.89	.	12.00	63.11	3	5	5	5	5	3	.	4.2	HM
MD05-0015B	2818.2	2.26	10	71.77	50.81	10.48	87.5	35.48	44.35	.	3	3	.	.	.	3	3.0	Oligo
MD05-0016A	2954.5	1.79	8	76.92	81.54	6.15	.	11.54	66.15	5	3	3	1	.	.	.	3.0	LM
MD05-0017A	0.0	0.00	0	.	.	.	.	.	1	1	1	.	.	.	.	.	1.0	Poly
MD05-0018B	0.0	0.00	0	.	.	.	.	.	1	1	1	.	.	.	.	.	1.0	LM
MD05-0019A	613.6	2.43	7	55.56	55.56	22.22	.	14.81	11.11	1	3	3	.	.	5	.	3.0	Poly
MD05-0020A	1772.7	2.33	9	66.67	39.74	11.54	.	17.95	26.92	5	3	3	3	3	.	.	3.4	HM
MD05-0021A	45.5	1.00	2	100.00	0.00	50.00	.	0.00	0.00	1	1	1	.	.	.	.	1.0	HM
MD05-0022A	8590.9	2.77	24	63.76	13.49	58.99	.	3.17	60.05	3	3	5	.	.	3	.	3.5	Poly
MD05-0023A	68.2	0.00	1	100.00	0.00	0.00	.	0.00	0.00	1	1	1	1	1	1	.	1.0	HM
MD05-0024A	3045.4	3.49	23	46.27	11.19	29.10	.	2.99	35.82	5	5	5	.	.	3	.	4.5	Poly
MD05-0025A	0.0	0.00	0	.	.	.	.	.	1	1	1	.	.	.	.	.	1.0	HM
-0052ALT	6159.1	3.08	26	57.93	5.17	54.98	.	4.43	41.70	3	3	5	.	.	3	.	3.5	Poly
MD05-0026	4431.8	2.43	17	71.79	15.90	67.69	.	8.72	66.15	5	3	3	.	.	5	.	4.0	Poly
MD05-0027	4136.4	2.87	17	56.04	6.59	56.04	.	4.95	64.29	5	3	3	.	.	3	.	3.5	Poly
MD05-0028	3568.2	3.31	24	50.96	1.91	20.38	.	10.83	54.14	5	5	5	.	.	5	.	5.0	Poly
MD05-0029	1863.6	1.50	8	84.15	71.95	2.44	.	6.10	8.54	5	1	3	.	.	3	.	3.0	Poly
MD05-0030	272.7	0.00	1	100.00	100.00	0.00	.	0.00	0.00	1	1	1	.	.	1	.	1.0	Poly
MD05-0031	1727.3	1.49	4	82.89	67.11	0.00	.	0.00	21.05	5	1	1	1	1	1	.	1.8	HM

Table 2. (Continued)

Site	Abundance (#/m ²)	Shannon -Wiener	No. Taxa (#/0.044 m ²)	% Domi-nance	% Pollution Indicative	% Tany/ Chiron	% Bivalve Abundance	% Deep Feeding	Abun-dance Score	Shan-score	Taxa score	Pollu-tion Score	Pollu-tion sen-sen Score	Tany Score	Bival Score	Deep Score	MAIA Index	Salinity Class
MD05-0032	2068.2	3.31	16	35.16	9.89	31.87	-	0.00	65.93	5	5	3	-	-	-	1	-	3.5 Poly
MD05-0033	1340.9	1.93	8	72.88	67.80	10.17	-	18.64	11.86	3	1	3	-	-	-	5	-	3.0 Poly
MD05-0034	4886.3	3.12	13	41.40	43.72	15.35	-	10.70	48.84	3	5	5	5	1	-	-	-	3.8 LM
MD05-0035	4204.5	3.58	23	48.65	11.89	50.27	-	3.24	64.32	5	5	-	-	-	-	3	-	4.5 Poly
MD05-0036	2227.3	3.39	17	33.67	12.24	40.82	-	2.04	56.12	5	5	-	-	-	-	3	-	4.0 Poly
MD05-0037	3363.6	1.78	11	84.46	62.84	22.97	-	0.00	29.73	5	1	3	-	-	-	1	-	2.5 Poly
MD05-0038	3250.0	1.58	11	81.12	74.13	9.09	-	3.50	15.38	5	1	3	-	-	-	3	-	3.0 Poly
MD05-0039	5568.2	3.63	27	44.49	6.12	69.39	-	15.10	33.47	5	5	-	-	-	-	5	-	5.0 Poly
MD05-0040	7409.1	3.74	31	36.81	0.92	49.69	-	1.53	70.25	3	5	5	-	-	-	3	-	4.0 Poly

Table 3. Site specific water quality measurements and sediment composition

Site	DNR Station	Sampling		Silt-Clay (%)	Depth (m)	Temp (°C)	pH	DO Conc (mg/L)	Salinity (psu)
		Date	Time (hh:mm)						
MD05-0001A	-	8/3/2005	11:04	24.11	0.5	29.43	8.30	5.12	27.33
			11:03		0.9	28.64	8.44	4.34	27.51
MD05-0002A	-	9/21/2005	8:44	91.68	0.5	26.33	7.76	6.16	13.94
			8:40		10.0	26.44	7.42	1.85	11.17
MD05-0003B	-	9/30/2005	12:04	90.30	0.5	23.63	7.79	5.22	9.96
			12:01		6.1	23.76	7.62	4.46	10.38
MD05-0004A	-	8/4/2005	11:03	5.59	0.5	30.80	8.15	7.15	24.47
			11:01		1.0	29.50	8.15	7.08	24.57
			11:00		1.5	28.95	8.13	6.62	24.59
MD05-0005A	-	8/30/2005	15:43	70.23	0.5	27.48	8.14	7.43	15.19
			15:45		15.1	27.13	7.46	0.32	20.34
MD05-0008A	-	9/8/2005	11:13	38.24	0.5	26.45	8.18	7.76	11.44
			11:08		4.8	25.91	7.58	4.74	12.05
MD05-0009B	-	9/20/2005	9:55	88.60	0.5	26.28	7.18	5.57	12.95
			9:55		1.8	26.29	7.17	5.49	12.95
MD05-0010A	-	8/30/2005	8:04	77.39	0.5	27.29	8.34	7.97	15.01
			8:06		23.4	26.91	7.61	0.15	21.78
MD05-0011A	-	9/29/2005	10:11	5.03	0.5	23.15	7.91	6.80	11.98
			10:10		1.6	23.13	7.91	7.16	11.98
MD05-0012A	-	8/3/2005	14:45	97.58	0.5	30.37	7.99	7.03	26.15
			14:44		0.8	30.31	7.97	6.97	26.15
MD05-0013A	-	8/30/2005	11:25	1.68	0.5	27.51	8.31	8.09	15.33
			11:26		6.2	26.95	8.07	5.74	16.10
MD05-0014A	-	9/28/2005	17:24	35.82	0.5	23.21	8.02	7.90	14.82
			17:23		4.1	22.41	7.88	7.43	14.74
MD05-0015B	-	9/1/2005	14:54	84.46	0.5	26.63	7.65	6.61	0.60
			14:55		3.2	26.60	7.58	6.55	0.60
MD05-0016A	-	9/21/2005	14:16	8.79	0.5	28.08	8.04	5.31	11.93
			14:15		1.3	27.99	8.02	5.31	11.93
MD05-0017A	-	8/30/2005	13:04	88.20	0.5	27.60	8.19	5.88	15.78
			13:06		21.5	26.70	7.54	0.68	22.61
MD05-0018B	-	8/31/2005	12:13	87.22	0.5	27.46	7.73	6.71	10.16
			12:15		12.0	26.62	7.25	2.76	11.14
MD05-0019A	-	9/28/2005	12:43	90.39	0.5	23.66	8.02	5.01	17.66
			12:41		4.0	23.49	7.91	4.54	18.18
MD05-0020A	-	9/13/2005	8:43	8.86	0.5	25.38	8.26	4.21	13.81
			8:40		3.0	25.36	8.22	4.11	13.82
MD05-0021A	-	8/29/2005	17:41	40.25	0.5	28.20	8.50	10.35	14.81
			17:46		10.0	27.11	7.47	0.81	17.12
MD05-0022A	-	8/4/2005	9:53	14.71	0.5	29.45	7.99	5.61	25.44

Table 3. (Continued)

Site	DNR Station	Sampling		Silt-Clay (%)	Depth (m)	Temp (°C)	pH	DO Conc (mg/L)	Salinity (psu)
		Date	Time (hh:mm)						
MD05-0023A	-	9/13/2005	11:16 11:15	84.71	0.5 8.6	26.31 25.56	8.27 7.49	8.53 2.94	14.67 15.45
MD05-0024A	-	8/3/2005	15:54	22.55	0.5	30.69	8.01	8.15	25.23
MD05-0025A	-	8/29/2005	12:04 12:06	24.00	0.5 14.6	27.40 27.18	8.06 7.31	5.91 0.28	14.68 16.73
MD05-0052ALT	-	8/3/2005	9:31 9:29 9:28	69.84	0.5 1.0 2.0	27.87 27.80 27.79	8.05 7.98 7.98	7.79 6.35 6.29	24.93 25.63 25.64
MD05-0026	NPS-02	8/4/2005	9:14 9:12 9:11	2.84	0.5 1.0 1.7	28.76 28.73 28.71	7.99 7.99 7.99	5.47 5.44 5.38	27.11 27.11 27.12
MD05-0027	NPS-07	8/3/2005	14:19 14:18	83.49	0.5 0.7	30.41 30.40	7.95 7.95	7.03 7.03	26.00 26.00
MD05-0028	NPS-10	8/3/2005	13:29 13:26	86.37	0.5 0.9	29.61 29.42	7.99 7.96	8.39 7.99	28.44 28.46
MD05-0029	HEC0012	8/2/2005	12:27	59.84	0.5	29.59	7.82	6.71	24.66
MD05-0030	SPR0009	8/2/2005	8:49 8:48	66.40	0.5 0.7	28.60 28.79	7.86 7.50	6.52 3.52	17.20 20.91
MD05-0031	TUV0034	8/2/2005	15:11	14.38	0.5	29.69	7.84	8.90	15.91
MD05-0032	XDN3724	8/2/2005	9:31 9:28 9:27	81.78	0.5 1.0 1.5	27.35 27.32 27.29	7.70 7.67 7.65	5.92 5.54 5.25	25.52 25.55 25.59
MD05-0033	XDN4797	8/2/2005	7:46 7:44	58.78	0.5 1.0	27.12 28.36	7.88 7.55	6.17 4.04	19.84 22.53
MD05-0034	NPC0012	8/2/2005	16:23	41.28	0.5	32.30	8.57	13.12	11.56
MD05-0035	XCM4878	8/4/2005	12:05 12:04 12:03	93.61	0.5 1.0 1.5	30.65 29.80 29.22	8.13 8.12 7.87	7.85 7.25 4.63	22.81 23.17 24.42
MD05-0036	XDN5737	8/2/2005	10:17 10:16 10:14	78.61	0.5 1.0 1.2	27.58 27.21 27.13	7.97 7.89 7.62	7.81 5.93 4.34	23.03 23.32 24.54
MD05-0037	MKL0010	8/2/2005	11:48 11:47	7.35	0.5 1.0	28.56 28.42	7.77 7.75	7.00 6.76	26.22 26.23
MD05-0038	XDN7545	8/2/2005	10:55 10:54	73.06	0.5 0.7	28.18 28.10	7.90 7.90	6.79 6.75	20.87 20.88

Table 3. (Continued)

Site	DNR Station	Sampling		Silt-Clay (%)	Depth (m)	Temp (°C)	pH	DO Conc (mg/L)	Salinity (psu)
		Date	Time (hh:mm)						
MD05-0039	XCM0159	8/3/2005	17:23	13.16	0.5	29.48	8.10	7.64	24.07
			17:22		1.0	29.47	8.10	7.60	24.07
			17:21		1.7	29.43	8.09	7.42	24.07
MD05-0040	XBM1301	8/3/2005	12:26	20.62	0.5	29.08	7.99	7.46	29.59
			12:24		1.0	28.68	7.95	6.99	29.60
			12:22		1.7	28.44	7.93	6.56	29.62

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**APPENDIX
SPECIES ABUNDANCES**

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0001A		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta Oligochaeta	106	2409
Annelida : Polychaeta Exogone dispar	56	1273
Glycera americana	1	23
Heteromastus filiformis	3	68
Mediomastus ambiseta	34	773
Melinna maculata	1	23
Podarkeopsis levifuscina	1	23
Polydora cornuta	3	68
Prionospio heterobranchia	62	1409
Scoletoma tenuis	1	23
Spiochaetopterus costarum	4	91
Streblospio benedicti	53	1205
Arthropoda : Amphipoda Ampelisca abdita	84	1909
Ampelisca vadorum	2	45
Cerapus tubularis (Epi.)	1	23
Arthropoda : Isopoda Cyathura burbancki	20	455
Arthropoda : Tanaidacea Hargeria rapax	2	45
Mollusca : Bivalvia Tagelus divisus	4	91
Mollusca : Gastropoda Odostomia engonia (Epi.)	5	114
Rictaxis punctostriatus	1	23
Nemertina Nemertina	1	23
Number of Taxa w/ Epi.	21	
Number of Taxa w/o Epi.	19	
Total Count w/ Epi.	445	
Total Count w/o Epi.	439	
Total Abundance w/ Epi.		10114
Total Abundance w/o Epi.		9977

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0002A		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta Tubificoides spp.	1	23
Annelida : Polychaeta Glycinde solitaria	4	91
Neanthes succinea	8	182
Mollusca : Bivalvia Macoma balthica	6	136
Macoma mitchelli	4	91
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	5	
Total Count w/ Epi.	23	
Total Count w/o Epi.	23	
Total Abundance w/ Epi.		523
Total Abundance w/o Epi.		523

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0003B		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta Tubificoides spp.	5	114
Annelida : Polychaeta Streblospio benedicti	2	45
Mollusca : Bivalvia Rangia cuneata	1	23
Number of Taxa w/ Epi.	3	
Number of Taxa w/o Epi.	3	
Total Count w/ Epi.	8	
Total Count w/o Epi.	8	
Total Abundance w/ Epi.		182
Total Abundance w/o Epi.		182

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0004A		
TAXA	Count	Abundance (#/m2)
Annelida : Polychaeta		
Clymenella torquata	3	68
Euclymene zonalis	4	91
Exogone dispar	5	114
Glycera americana	1	23
Glycinde solitaria	11	250
Mediomastus ambiseta	213	4841
Mediomastus spp. *	2	45
Melinna maculata	3	68
Odontosyllis fulgurans (Epi.)	1	23
Polydora cornuta	6	136
Sabellidae	4	91
Scoletoma tenuis	1	23
Spiochaetopterus costarum	7	159
Streblospio benedicti	5	114
Tharyx sp. A Morris	1	23
Arthropoda : Amphipoda		
Ampelisca abdita	3	68
Ampelisca spp. *	1	23
Ampelisca verrilli	25	568
Batea catharinensis (Epi.)	9	205
Elasmopus laevis (Epi.)	32	727
Ericthonius brasiliensis (Epi.)	3	68
Listriella barnardi	3	68
Monocorophium tuberculatum (Epi.)	5	114
Paracaprella tenuis (Epi.)	12	273
Rhepoxynius hudsoni	3	68
Arthropoda : Isopoda		
Cyathura burbancki	4	91
Cnidaria : Anthozoa		
Anthozoa	4	91
Mollusca : Bivalvia		
Mulinia lateralis	3	68
Tagelus divisus	25	568
Tellina agilis	1	23
Nemertina		
Nemertina	3	68
Phoronida		
Phoronis spp.	17	386
Number of Taxa w/ Epi.	30	
Number of Taxa w/o Epi.	24	
Total Count w/ Epi.	420	
Total Count w/o Epi.	358	
Total Abundance w/ Epi.		9545
Total Abundance w/o Epi.		8136

*Indicates taxa skipped in taxa counts

NATIONAL COASTAL ASSESSMENT 2005
MARYLAND COASTAL BAYS
BENTHIC TAXA INFORMATION

STATION : MD05-0005A		
TAXA	Count	Abundance (#/m2)
Miscellanea		
No Organisms Present		
Number of Taxa w/ Epi.	0	
Number of Taxa w/o Epi.	0	
Total Count w/ Epi.	0	
Total Count w/o Epi.	0	
Total Abundance w/ Epi.		
Total Abundance w/o Epi.		

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0008A		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta <i>Tubificoides</i> spp.	11	250
Annelida : Polychaeta <i>Heteromastus filiformis</i>	19	432
<i>Marenzelleria viridis</i>	1	23
<i>Neanthes succinea</i>	9	205
<i>Polydora cornuta</i>	11	250
<i>Streblospio benedicti</i>	9	205
Arthropoda : Amphipoda		
<i>Leptocheirus plumulosus</i>	21	477
<i>Melita nitida</i> (Epi.)	1	23
Mollusca : Bivalvia		
<i>Macoma balthica</i>	1	23
<i>Macoma mitchelli</i>	7	159
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	9	
Total Count w/ Epi.	90	
Total Count w/o Epi.	89	
Total Abundance w/ Epi.		2045
Total Abundance w/o Epi.		2023

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0009B		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta <i>Tubificoides</i> spp.	273	6205
Annelida : Polychaeta <i>Glycinde solitaria</i>	5	114
<i>Heteromastus filiformis</i>	3	68
<i>Neanthes succinea</i>	1	23
<i>Streblospio benedicti</i>	2	45
Arthropoda : Isopoda <i>Cyathura polita</i>	3	68
Mollusca : Bivalvia <i>Macoma balthica</i>	1	23
<i>Macoma mitchelli</i>	6	136
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Count w/ Epi.	294	
Total Count w/o Epi.	294	
Total Abundance w/ Epi.		6682
Total Abundance w/o Epi.		6682

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0010A		
TAXA	Count	Abundance (#/m2)
Arthropoda : Amphipoda <i>Apocorophium acutum</i> (Epi.)	1	23
Number of Taxa w/ Epi.	1	
Number of Taxa w/o Epi.	0	
Total Count w/ Epi.	1	
Total Count w/o Epi.	0	
Total Abundance w/ Epi.		23
Total Abundance w/o Epi.		

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0011A		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta <i>Tubificoides</i> spp.	6	136
Annelida : Polychaeta <i>Eteone heteropoda</i>	1	23
<i>Heteromastus filiformis</i>	6	136
<i>Marenzelleria viridis</i>	18	409
<i>Streblospio benedicti</i>	14	318
Mollusca : Bivalvia <i>Macoma mitchelli</i>	9	205
Number of Taxa w/ Epi.	6	
Number of Taxa w/o Epi.	6	
Total Count w/ Epi.	54	
Total Count w/o Epi.	54	
Total Abundance w/ Epi.		1227
Total Abundance w/o Epi.		1227

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0012A		
TAXA	Count	Abundance (#/m2)
Annelida : Polychaeta		
<i>Euclymene zonalis</i>	1	23
<i>Glycera americana</i>	2	45
<i>Glycinde solitaria</i>	1	23
<i>Mediomastus</i> spp.	11	250
<i>Melinna maculata</i>	1	23
<i>Notomastus</i> sp. A Ewing	2	45
<i>Parapriionospio pinnata</i>	3	68
<i>Sabaco elongatus</i>	8	182
<i>Scoletoma tenuis</i>	7	159
<i>Spiochaetopterus costarum</i>	1	23
<i>Streblospio benedicti</i>	6	136
Arthropoda : Amphipoda		
<i>Ampelisca abdita</i>	1	23
<i>Listriella barnardi</i>	5	114
Arthropoda : Isopoda		
<i>Edotea triloba</i> (Epi.)	5	114
Mollusca : Bivalvia		
<i>Gemma gemma</i>	13	295
Phoronida		
<i>Phoronis</i> spp.	4	91
Number of Taxa w/ Epi.	16	
Number of Taxa w/o Epi.	15	
Total Count w/ Epi.	71	
Total Count w/o Epi.	66	
Total Abundance w/ Epi.		1614
Total Abundance w/o Epi.		1500

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0013A		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta <i>Tubificoides</i> spp.	1	23
Annelida : Polychaeta <i>Glycinde solitaria</i>	4	91
<i>Parapriionospio pinnata</i>	4	91
<i>Pseudeurythoe paucibranchiata</i>	1	23
Arthropoda : Amphipoda <i>Ampelisca abdita</i>	2	45
<i>Lepidactylus dytiscus</i>	3	68
Mollusca : Gastropoda <i>Acteocina canaliculata</i>	5	114
<i>Haminoea solitaria</i>	2	45
Nemertina <i>Micrura leidyi</i>	1	23
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Count w/ Epi.	23	
Total Count w/o Epi.	23	
Total Abundance w/ Epi.		523
Total Abundance w/o Epi.		523

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0014A		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta		
Tubificidae imm. without capilliform cha	23	523
Tubificoides spp.	39	886
Annelida : Polychaeta		
Eteone heteropoda	1	23
Glycinde solitaria	1	23
Heteromastus filiformis	80	1818
Marenzelleria viridis	2	45
Neanthes succinea	12	273
Polydora cornuta	3	68
Streblospio benedicti	33	750
Mollusca : Bivalvia		
Geukensia demissa (Epi.)	3	68
Macoma balthica	8	182
Macoma mitchelli	18	409
Mulinia lateralis	1	23
Mollusca : Gastropoda		
Sayella chesapeakea (Epi.)	1	23
Nemertina		
Carinoma tremaphoros	3	68
Micrura leidyi	1	23
Number of Taxa w/ Epi.	16	
Number of Taxa w/o Epi.	14	
Total Count w/ Epi.	229	
Total Count w/o Epi.	225	
Total Abundance w/ Epi.		5205
Total Abundance w/o Epi.		5114

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0015B		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta		
Branchiura sowerbyi	9	205
Limnodrilus hoffmeisteri	22	500
Tubificidae imm. without capilliform cha	24	545
Annelida : Polychaeta		
Boccardiella ligerica	4	91
Marenzelleria viridis	1	23
Arthropoda : Amphipoda		
Apocorophium lacustre (Epi.)	10	227
Gammarus daiberi (Epi.)	1	23
Arthropoda : Chironomidae		
Coelotanypus spp.	7	159
Harnischia spp.	1	23
Arthropoda : Decapoda		
Rhithropanopeus harrisii (Epi.)	6	136
Arthropoda : Isopoda		
Cyathura polita	11	250
Arthropoda : Odonata		
Gomphus spp.	1	23
Mollusca : Bivalvia		
Corbicula fluminea	43	977
Mytilopsis leucophaeata (Epi.)	12	273
Rangia cuneata	1	23
Number of Taxa w/ Epi.	15	
Number of Taxa w/o Epi.	11	
Total Count w/ Epi.	153	
Total Count w/o Epi.	124	
Total Abundance w/ Epi.		3477
Total Abundance w/o Epi.		2818

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0016A		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta <i>Tubificoides</i> spp.	85	1932
Annelida : Polychaeta <i>Eteone heteropoda</i>	6	136
<i>Heteromastus filiformis</i>	1	23
<i>Neanthes succinea</i>	6	136
<i>Streblospio benedicti</i>	15	341
Arthropoda : Cumacea <i>Cyclaspis varians</i>	2	45
Arthropoda : Isopoda <i>Edotea triloba</i> (Epi.)	5	114
Mollusca : Bivalvia <i>Macoma balthica</i>	8	182
<i>Macoma mitchelli</i>	7	159
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	8	
Total Count w/ Epi.	135	
Total Count w/o Epi.	130	
Total Abundance w/ Epi.		3068
Total Abundance w/o Epi.		2955

NATIONAL COASTAL ASSESSMENT 2005
MARYLAND COASTAL BAYS
BENTHIC TAXA INFORMATION

STATION : MD05-0017A		
TAXA	Count	Abundance (#/m2)
Miscellanea		
No Organisms Present		
Number of Taxa w/ Epi.	0	
Number of Taxa w/o Epi.	0	
Total Count w/ Epi.	0	
Total Count w/o Epi.	0	
Total Abundance w/ Epi.		
Total Abundance w/o Epi.		

NATIONAL COASTAL ASSESSMENT 2005
MARYLAND COASTAL BAYS
BENTHIC TAXA INFORMATION

STATION : MD05-0018B		
TAXA	Count	Abundance (#/m2)
Miscellanea		
No Organisms Present		
Number of Taxa w/ Epi.	0	
Number of Taxa w/o Epi.	0	
Total Count w/ Epi.	0	
Total Count w/o Epi.	0	
Total Abundance w/ Epi.		
Total Abundance w/o Epi.		

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0019A		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta <i>Tubificoides</i> spp.	1	23
Annelida : Polychaeta <i>Glycinde solitaria</i>	4	91
<i>Mediomastus ambiseta</i>	2	45
<i>Neanthes succinea</i>	2	45
<i>Parapriionospio pinnata</i>	11	250
<i>Streblosprio benedicti</i>	3	68
Mollusca : Bivalvia <i>Macoma mitchelli</i>	4	91
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	7	
Total Count w/ Epi.	27	
Total Count w/o Epi.	27	
Total Abundance w/ Epi.		614
Total Abundance w/o Epi.		614

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 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0020A		
TAXA	Count	Abundance (#/m2)
Annelida : Polychaeta		
<i>Heteromastus filiformis</i>	21	477
<i>Marenzelleria viridis</i>	5	114
<i>Neanthes succinea</i>	2	45
<i>Streblospio benedicti</i>	31	705
Arthropoda : Isopoda		
<i>Cyathura polita</i>	2	45
Mollusca : Bivalvia		
<i>Macoma balthica</i>	2	45
<i>Macoma mitchelli</i>	12	273
Nemertina		
<i>Carinoma tremaphoros</i>	1	23
<i>Micrura leidyi</i>	2	45
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Count w/ Epi.	78	
Total Count w/o Epi.	78	
Total Abundance w/ Epi.		1773
Total Abundance w/o Epi.		1773

NATIONAL COASTAL ASSESSMENT 2005
MARYLAND COASTAL BAYS
BENTHIC TAXA INFORMATION

STATION : MD05-0021A		
TAXA	Count	Abundance (#/m2)
Annelida : Polychaeta		
Marenzelleria viridis	1	23
Arthropoda : Amphipoda		
Apocorophium lacustre (Epi.)	1	23
Nemertina		
Carinoma tremaphoros	1	23
Number of Taxa w/ Epi.	3	
Number of Taxa w/o Epi.	2	
Total Count w/ Epi.	3	
Total Count w/o Epi.	2	
Total Abundance w/ Epi.		68
Total Abundance w/o Epi.		45

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0022A		
TAXA	Count	Abundance (#/m2)
Annelida : Polychaeta		
<i>Capitella capitata</i> complex	2	45
<i>Clymenella torquata</i>	4	91
<i>Euclymene zonalis</i>	2	45
<i>Exogone dispar</i>	3	68
<i>Glycera americana</i>	1	23
<i>Glycinde solitaria</i>	4	91
<i>Heteromastus filiformis</i>	16	364
<i>Mediomastus ambisetosa</i>	179	4068
<i>Mediomastus</i> spp. *	15	341
<i>Notomastus</i> sp. A Ewing	8	182
<i>Prionospio heterobranchia</i>	1	23
<i>Sabaco elongatus</i>	1	23
<i>Scolelepis texana</i>	1	23
<i>Scoletoma tenuis</i>	21	477
<i>Spiochaetopterus costarum</i>	6	136
<i>Streblospio benedicti</i>	47	1068
Arthropoda : Amphipoda		
<i>Ampelisca abdita</i>	29	659
<i>Ampelisca</i> spp. *	1	23
<i>Ampelisca verrilli</i>	3	68
<i>Elasmopus laevis</i> (Epi.)	3	68
<i>Listriella barnardi</i>	5	114
<i>Monocorophium tuberculatum</i> (Epi.)	10	227
Arthropoda : Cumacea		
<i>Cyclaspis varians</i>	1	23
Arthropoda : Isopoda		
<i>Cyathura burbancki</i>	11	250
<i>Edotea triloba</i> (Epi.)	4	91
<i>Paracerceis caudata</i> (Epi.)	1	23
Arthropoda : Mysidacea		
<i>Americanamysis bigelowi</i> (Epi.)	2	45
Cnidaria : Anthozoa		
Anthozoa	1	23
Mollusca : Bivalvia		
<i>Mulinia lateralis</i>	4	91
<i>Tagelus divisus</i>	8	182
Mollusca : Gastropoda		
<i>Odostomia engonia</i> (Epi.)	3	68
Nemertina		
<i>Nemertina</i>	4	91
Number of Taxa w/ Epi.	30	
Number of Taxa w/o Epi.	24	
Total Count w/ Epi.	401	
Total Count w/o Epi.	378	
Total Abundance w/ Epi.		9114
Total Abundance w/o Epi.		8591

*Indicates taxa skipped in taxa counts

NATIONAL COASTAL ASSESSMENT 2005
MARYLAND COASTAL BAYS
BENTHIC TAXA INFORMATION

STATION : MD05-0023A			
TAXA	Count	Abundance (#/m2)	
Annelida : Polychaeta			
Neanthes succinea	3		68
Number of Taxa w/ Epi.	1		
Number of Taxa w/o Epi.	1		
Total Count w/ Epi.	3		
Total Count w/o Epi.	3		
Total Abundance w/ Epi.			68
Total Abundance w/o Epi.			68

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 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0024A		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta		
Oligochaeta	3	68
Annelida : Polychaeta		
Dipolydora quadrilobata (Epi.)	1	23
Exogone dispar	9	205
Glycera americana	1	23
Glycinde solitaria	1	23
Heteromastus filiformis	2	45
Leitoscoloplos robustus	6	136
Mediomastus ambiseta	15	341
Mediomastus spp. *	13	295
Melinna maculata	5	114
Notomastus sp. A Ewing	7	159
Polydora cornuta	1	23
Sabaco elongatus	2	45
Sabellidae	1	23
Scolelepis bousfieldi	1	23
Scoletoma tenuis	34	773
Spiochaetopterus costarum	3	68
Streblospio benedicti	15	341
Arthropoda : Amphipoda		
Ampelisca abdita	1	23
Batea catharinensis (Epi.)	1	23
Elasmopus laevis (Epi.)	3	68
Listriella barnardi	1	23
Arthropoda : Cumacea		
Cyclaspis varians	1	23
Arthropoda : Isopoda		
Cyathura burbancki	7	159
Chordata : Ascidiacea		
Ascidiae (Epi.)	6	136
Mollusca : Bivalvia		
Gemma gemma	1	23
Tagelus divisus	3	68
Mollusca : Gastropoda		
Crepidula spp. (Epi.)	1	23
Turbonilla spp. (Epi.)	1	23
Phoronida		
Phoronis spp.	1	23
Number of Taxa w/ Epi.	29	
Number of Taxa w/o Epi.	23	
Total Count w/ Epi.	147	
Total Count w/o Epi.	134	
Total Abundance w/ Epi.		3341
Total Abundance w/o Epi.		3045

*Indicates taxa skipped in taxa counts

NATIONAL COASTAL ASSESSMENT 2005
MARYLAND COASTAL BAYS
BENTHIC TAXA INFORMATION

STATION : MD05-0025A		
TAXA	Count	Abundance (#/m2)
Miscellanea		
No Organisms Present		
Number of Taxa w/ Epi.	0	
Number of Taxa w/o Epi.	0	
Total Count w/ Epi.	0	
Total Count w/o Epi.	0	
Total Abundance w/ Epi.		
Total Abundance w/o Epi.		

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0026		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta Oligochaeta	7	159
Annelida : Polychaeta Clymenella torquata	7	159
Euclymenene zonalis	3	68
Exogone dispar	2	45
Heteromastus filiformis	1	23
Leitoscoloplos robustus	1	23
Maldanidae *	1	23
Mediomastus ambiseta	109	2477
Parapionosyllis longicirrata	3	68
Prionospio heterobranchia	1	23
Scolelepis texana	1	23
Scoletoma tenuis	7	159
Streblospio benedicti	31	705
Arthropoda : Amphipoda Listriella barnardi	2	45
Arthropoda : Isopoda Cyathura burbancki	2	45
Mollusca : Bivalvia Gemma gemma	4	91
Tagelus divisus	6	136
Tellina agilis	7	159
Mollusca : Gastropoda Gastropoda (Epi.)	2	45
Number of Taxa w/ Epi.	18	
Number of Taxa w/o Epi.	17	
Total Count w/ Epi.	197	
Total Count w/o Epi.	195	
Total Abundance w/ Epi.		4477
Total Abundance w/o Epi.		4432

*Indicates taxa skipped in taxa counts

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 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0027		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta Oligochaeta	1	23
Annelida : Polychaeta Arabella iricolor	2	45
Glycera americana	2	45
Leitoscoloplos robustus	12	273
Mediomastus californiensis	3	68
Mediomastus spp. *	80	1818
Melinna maculata	3	68
Notomastus sp. A Ewing	2	45
Parapriionospio pinnata	2	45
Sabaco elongatus	19	432
Scoletoma tenuis	22	500
Streblospio benedicti	10	227
Arthropoda : Amphipoda Ampelisca abdita	1	23
Listriella barnardi	4	91
Arthropoda : Isopoda Cyathura burbancki	10	227
Mollusca : Bivalvia Gemma gemma	8	182
Tagelus divisus	1	23
Number of Taxa w/ Epi.	16	
Number of Taxa w/o Epi.	16	
Total Count w/ Epi.	182	
Total Count w/o Epi.	182	
Total Abundance w/ Epi.		4136
Total Abundance w/o Epi.		4136

*Indicates taxa skipped in taxa counts

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0028			
TAXA	Count	Abundance (#/m2)	
Annelida : Polychaeta			
Clymenella torquata	2		45
Euclymene zonalis	4		91
Exogone dispar	1		23
Glycera americana	5		114
Heteromastus filiformis	1		23
Mediomastus ambieta	1		23
Mediomastus californiensis	60		1364
Mediomastus spp. *	7		159
Notomastus sp. A Ewing	2		45
Parapronospio pinnata	1		23
Platynereis dumerilii	1		23
Polydora cornuta	1		23
Sabaco elongatus	8		182
Scoletoma tenuis	11		250
Spiochaetopterus costarum	1		23
Streblospio benedicti	2		45
Tharyx sp. A Morris	3		68
Arthropoda : Amphipoda			
Ampelisca abdita	2		45
Listriella barnardi	20		455
Monocorophium tuberculatum (Epi.)	1		23
Arthropoda : Cumacea			
Cyclaspis varians	1		23
Arthropoda : Isopoda			
Cyathura burbancki	4		91
Edotea triloba (Epi.)	1		23
Mollusca : Bivalvia			
Gemma gemma	14		318
Tagelus divisus	3		68
Mollusca : Gastropoda			
Gastropoda (Epi.)	4		91
Nemertina			
Nemertina	1		23
Phoronida			
Phoronis spp.	1		23
Number of Taxa w/ Epi.	27		
Number of Taxa w/o Epi.	24		
Total Count w/ Epi.	163		
Total Count w/o Epi.	157		
Total Abundance w/ Epi.		3705	
Total Abundance w/o Epi.		3568	

*Indicates taxa skipped in taxa counts

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0029		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta Oligochaeta	2	45
Annelida : Polychaeta Laeonereis culveri	10	227
Leitoscoloplos robustus	4	91
Mediomastus spp.	1	23
Neanthes succinea	1	23
Streblospio benedicti	59	1341
Mollusca : Bivalvia Gemma gemma	4	91
Tellina agilis	1	23
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Count w/ Epi.	82	
Total Count w/o Epi.	82	
Total Abundance w/ Epi.		1864
Total Abundance w/o Epi.		1864

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0030		
TAXA	Count	Abundance (#/m2)
Annelida : Polychaeta Streblospio benedicti	12	273
Number of Taxa w/ Epi.	1	
Number of Taxa w/o Epi.	1	
Total Count w/ Epi.	12	
Total Count w/o Epi.	12	
Total Abundance w/ Epi.		273
Total Abundance w/o Epi.		273

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MARYLAND COASTAL BAYS
BENTHIC TAXA INFORMATION

STATION : MD05-0031		
TAXA	Count	Abundance (#/m2)
Annelida : Polychaeta		
<i>Capitella capitata</i> complex	16	364
<i>Hobsonia florida</i>	9	205
<i>Streblospio benedicti</i>	47	1068
Arthropoda : Chironomidae		
<i>Chironomus</i> spp.	4	91
Number of Taxa w/ Epi.	4	
Number of Taxa w/o Epi.	4	
Total Count w/ Epi.	76	
Total Count w/o Epi.	76	
Total Abundance w/ Epi.		1727
Total Abundance w/o Epi.		1727

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0032			
TAXA		Count	Abundance (#/m2)
Annelida : Polychaeta			
Clymenella torquata		1	23
Dipolydora quadrilobata (Epi.)		1	23
Eteone heteropoda		1	23
Euclymene zonalis		3	68
Glycera americana		1	23
Leitoscoloplos robustus		1	23
Mediomastus ambiseta		6	136
Mediomastus californiensis		20	455
Mediomastus spp. *		6	136
Melinna maculata		3	68
Notomastus sp. A Ewing		11	250
Sabaco elongatus		12	273
Scoletoma tenuis		12	273
Streblospio benedicti		8	182
Arthropoda : Amphipoda			
Ampelisca abdita		1	23
Listriella barnardi		2	45
Arthropoda : Decapoda			
Ogyrides alphaerostris		1	23
Cnidaria : Anthozoa			
Anthozoa		2	45
Mollusca : Gastropoda			
Turbonilla spp. (Epi.)		2	45
Number of Taxa w/ Epi.		18	
Number of Taxa w/o Epi.		16	
Total Count w/ Epi.		94	
Total Count w/o Epi.		91	
Total Abundance w/ Epi.			2136
Total Abundance w/o Epi.			2068

*Indicates taxa skipped in taxa counts

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0033			
TAXA	Count	Abundance (#/m2)	
Annelida : Oligochaeta			
Tubificidae imm. without capilliform cha	3		68
Annelida : Polychaeta			
Heteromastus filiformis	3		68
Leitoscoloplos robustus	1		23
Podarkeopsis levifuscina	2		45
Streblospio benedicti	37		841
Mollusca : Bivalvia			
Gemma gemma	5		114
Tellina agilis	6		136
Nemertina			
Nemertina	2		45
Number of Taxa w/ Epi.	8		
Number of Taxa w/o Epi.	8		
Total Count w/ Epi.	59		
Total Count w/o Epi.	59		
Total Abundance w/ Epi.			1341
Total Abundance w/o Epi.			1341

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 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0034		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta		
Tubificidae imm. without capilliform cha	46	1045
Tubificoides spp.	43	977
Annelida : Polychaeta		
Eteone heteropoda	1	23
Heteromastus filiformis	15	341
Laeonereis culveri	23	523
Mediomastus spp.	1	23
Neanthes succinea	8	182
Streblospio benedicti	3	68
Arthropoda : Amphipoda		
Leptocheirus plumulosus	21	477
Melita nitida (Epi.)	1	23
Arthropoda : Chironomidae		
Chironomus spp.	1	23
Arthropoda : Isopoda		
Cyathura polita	9	205
Edotea triloba (Epi.)	9	205
Mollusca : Bivalvia		
Tellina agilis	23	523
Nemertina		
Nemertina	21	477
Number of Taxa w/ Epi.	15	
Number of Taxa w/o Epi.	13	
Total Count w/ Epi.	225	
Total Count w/o Epi.	215	
Total Abundance w/ Epi.		5114
Total Abundance w/o Epi.		4886

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 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0035		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta		
Tubificidae imm. without capilliform cha	4	91
Annelida : Polychaeta		
Ancistrosyllis hartmanae	1	23
Clymenella torquata	4	91
Diopatra cuprea	4	91
Euclymene zonalis	4	91
Glycera americana	3	68
Glycinde solitaria	7	159
Heteromastus filiformis	6	136
Leitoscoloplos robustus	2	45
Mediomastus ambieta	5	114
Mediomastus californiensis	31	705
Mediomastus spp. *	54	1227
Melinna maculata	7	159
Notomastus sp. A Ewing	5	114
Parapriionospio pinnata	5	114
Polydora cornuta	2	45
Sabaco elongatus	4	91
Scoletoma tenuis	9	205
Streblospio benedicti	12	273
Arthropoda : Amphipoda		
Cerapus tubularis (Epi.)	1	23
Listriella barnardi	7	159
Monocorophium tuberculatum (Epi.)	2	45
Arthropoda : Isopoda		
Edotea triloba (Epi.)	4	91
Mollusca : Bivalvia		
Mulinia lateralis	1	23
Tagelus divisus	1	23
Tellina agilis	4	91
Mollusca : Gastropoda		
Turbonilla spp. (Epi.)	2	45
Phoronida		
Phoronis spp.	3	68
Platyhelminthes : Turbellaria		
Turbellaria (Epi.)	2	45
Number of Taxa w/ Epi.	28	
Number of Taxa w/o Epi.	23	
Total Count w/ Epi.	196	
Total Count w/o Epi.	185	
Total Abundance w/ Epi.		4455
Total Abundance w/o Epi.		4205

*Indicates taxa skipped in taxa counts

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0036		
TAXA	Count	Abundance (#/m2)
Annelida : Polychaeta		
Clymenella torquata	18	409
Euclymene zonalis	1	23
Glycera americana	1	23
Glycinde solitaria	2	45
Heteromastus filiformis	1	23
Leitoscoloplos robustus	7	159
Mediomastus ambiseta	4	91
Mediomastus spp. *	11	250
Melinna maculata	2	45
Notomastus sp. A Ewing	11	250
Parapriionospio pinnata	1	23
Podarkeopsis levifuscina	1	23
Sabaco elongatus	2	45
Scoletoma tenuis	12	273
Streblospio benedicti	11	250
Arthropoda : Amphipoda		
Listriella barnardi	11	250
Arthropoda : Mysidacea		
Americamysis spp. (Epi.)	1	23
Mollusca : Bivalvia		
Bivalvia	1	23
Tagelus divisus	1	23
Platyhelminthes : Turbellaria		
Turbellaria (Epi.)	1	23
Number of Taxa w/ Epi.	19	
Number of Taxa w/o Epi.	17	
Total Count w/ Epi.	100	
Total Count w/o Epi.	98	
Total Abundance w/ Epi.		2273
Total Abundance w/o Epi.		2227

*Indicates taxa skipped in taxa counts

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0037		
TAXA	Count	Abundance (#/m2)
Annelida : Polychaeta		
<i>Euclymene zonalis</i>	2	45
<i>Heteromastus filiformis</i>	2	45
<i>Leitoscoloplos robustus</i>	4	91
<i>Mediomastus ambiseta</i>	27	614
<i>Mediomastus</i> spp. *	5	114
<i>Notomastus</i> sp. A Ewing	4	91
<i>Pista palmata</i>	2	45
<i>Polydora cornuta</i>	1	23
<i>Scoletoma tenuis</i>	2	45
<i>Streblospio benedicti</i>	93	2114
<i>Tharyx</i> sp. A Morris	5	114
Arthropoda : Amphipoda		
<i>Listriella barnardi</i>	1	23
Arthropoda : Isopoda		
<i>Edotea triloba</i> (Epi.)	1	23
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	11	
Total Count w/ Epi.	149	
Total Count w/o Epi.	148	
Total Abundance w/ Epi.		3386
Total Abundance w/o Epi.		3364

*Indicates taxa skipped in taxa counts

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 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0038		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta Oligochaeta	1	23
Annelida : Polychaeta Glycinde solitaria	2	45
Heteromastus filiformis	2	45
Leitoscoloplos robustus	9	205
Mediomastus ambieta	8	182
Mediomastus spp. *	2	45
Melinna maculata	3	68
Neanthes succinea	3	68
Podarkeopsis levifuscina	2	45
Streblospio benedicti	106	2409
Mollusca : Bivalvia Gemma gemma	4	91
Tellina agilis	1	23
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	11	
Total Count w/ Epi.	143	
Total Count w/o Epi.	143	
Total Abundance w/ Epi.		3250
Total Abundance w/o Epi.		3250

*Indicates taxa skipped in taxa counts

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 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0039		
TAXA	Count	Abundance (#/m2)
Annelida : Polychaeta		
<i>Clymenella torquata</i>	2	45
<i>Diopatra cuprea</i>	5	114
<i>Euclymene zonalis</i>	2	45
<i>Exogone dispar</i>	14	318
<i>Glycera americana</i>	3	68
<i>Glyceridae *</i>	1	23
<i>Glycinde solitaria</i>	24	545
<i>Mediomastus ambiseta</i>	60	1364
<i>Mediomastus spp. *</i>	17	386
<i>Melinna maculata</i>	3	68
<i>Nereididae</i>	1	23
<i>Notomastus sp. A Ewing</i>	1	23
<i>Parapriionospio pinnata</i>	5	114
<i>Podarkeopsis levifuscina</i>	1	23
<i>Polydora cornuta</i>	3	68
<i>Sabellidae</i>	2	45
<i>Scoletoma tenuis</i>	1	23
<i>Spiochaetopterus costarum</i>	11	250
<i>Streblospio benedicti</i>	7	159
Arthropoda : Amphipoda		
<i>Ampelisca abdita</i>	13	295
<i>Ampelisca verrilli</i>	5	114
<i>Batea catharinensis (Epi.)</i>	52	1182
<i>Elasmopus laevis (Epi.)</i>	5	114
<i>Erithonius brasiliensis (Epi.)</i>	3	68
<i>Paracaprella tenuis (Epi.)</i>	45	1023
<i>Parametopella cypria (Epi.)</i>	1	23
Arthropoda : Isopoda		
<i>Cyathura burbancki</i>	3	68
<i>Edotea triloba (Epi.)</i>	4	91
<i>Erichsonella filiformis (Epi.)</i>	2	45
Cnidaria : Anthozoa		
Anthozoa	1	23
Mollusca : Bivalvia		
<i>Mulinia lateralis</i>	3	68
<i>Tagelus divisus</i>	32	727
<i>Tellina agilis</i>	2	45
Mollusca : Gastropoda		
<i>Acteocina canaliculata</i>	5	114
Nemertina		
Nemertina	16	364
Phoronida		
<i>Phoronis spp.</i>	2	45
Number of Taxa w/ Epi.	34	
Number of Taxa w/o Epi.	27	
Total Count w/ Epi.	357	
Total Count w/o Epi.	245	
Total Abundance w/ Epi.		8114
Total Abundance w/o Epi.		5568

*Indicates taxa skipped in taxa counts

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0040		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta		
Oligochaeta	25	568
Annelida : Polychaeta		
Aricidea catherinae	3	68
Clymenella torquata	12	273
Drilonereis longa	1	23
Euclymenes zonalis	54	1227
Eumida sanguinea	4	91
Exogone dispar	5	114
Glycinde solitaria	6	136
Hydroides dianthus (Epi.)	27	614
Leitoscoloplos robustus	2	45
Marphysa sanguinea	2	45
Mediomastus californiensis	54	1227
Mediomastus spp. *	66	1500
Notomastus sp. A Ewing	16	364
Phyllodoce arenae	2	45
Pista palmata	1	23
Polycirrus spp.	22	500
Scoletoma tenuis	6	136
Spiochaetopterus costarum	6	136
Tharyx sp. A Morris	2	45
Arthropoda : Amphipoda		
Ampelisca abdita	7	159
Ampelisca vadorum	1	23
Ampelisca verrilli	2	45
Batea catharinensis (Epi.)	1	23
Ericthonius brasiliensis (Epi.)	1	23
Listriella barnardi	2	45
Monocorophium tuberculatum (Epi.)	5	114
Arthropoda : Isopoda		
Ptilanthura tenuis	1	23
Echinodermata : Holothuroidea		
Pentamera pulcherrima	3	68
Hemichordata		
Saccoglossus kowalevskii	2	45
Mollusca : Bivalvia		
Mercenaria mercenaria	1	23
Mulinia lateralis	3	68
Tagelus divisus	1	23
Mollusca : Gastropoda		
Acteonina canaliculata	1	23
Crepidula spp. (Epi.)	2	45
Phoronida		
Phoronis spp.	13	295
Number of Taxa w/ Epi.	35	
Number of Taxa w/o Epi.	30	
Total Count w/ Epi.	362	
Total Count w/o Epi.	326	
Total Abundance w/ Epi.		8227
Total Abundance w/o Epi.		7409

*Indicates taxa skipped in taxa counts

NATIONAL COASTAL ASSESSMENT 2005
 MARYLAND COASTAL BAYS
 BENTHIC TAXA INFORMATION

STATION : MD05-0052ALT		
TAXA	Count	Abundance (#/m2)
Annelida : Oligochaeta		
Oligochaeta	1	23
Annelida : Polychaeta		
Clymenella torquata	2	45
Euclymene zonalis	2	45
Exogone dispar	52	1182
Glycera americana	1	23
Glycinde solitaria	17	386
Leitoscoloplos robustus	1	23
Mediomastus ambiseta	105	2386
Melinna maculata	11	250
Notomastus sp. A Ewing	2	45
Odontosyllis fulgurans (Epi.)	47	1068
Parapriionospio pinnata	13	295
Polydora cornuta	1	23
Sabellidae	24	545
Scoletoma tenuis	6	136
Spiochaetopterus costarum	3	68
Streblospio benedicti	1	23
Arthropoda : Amphipoda		
Ampelisca abdita	5	114
Ampelisca verrilli	5	114
Batea catharinensis (Epi.)	20	455
Cerapus tubularis (Epi.)	1	23
Elasmopus laevis (Epi.)	32	727
Ericthonius brasiliensis (Epi.)	2	45
Lysianopsis alba	1	23
Microprotopus raneyi (Epi.)	2	45
Monocorophium tuberculatum (Epi.)	1	23
Paracaprella tenuis (Epi.)	13	295
Arthropoda : Isopoda		
Edotea triloba (Epi.)	4	91
Arthropoda : Pycnogonida		
Anoplodactylus petiolatus (Epi.)	1	23
Callipallene brevirostris (Epi.)	2	45
Cnidaria : Anthozoa		
Anthozoa	1	23
Hemichordata		
Saccoglossus kowalevskii	1	23
Mollusca : Bivalvia		
Mya arenaria	1	23
Tagelus divisus	11	250
Mollusca : Gastropoda		
Acteonina canaliculata	2	45
Nudibranchia (Epi.)	1	23
Turbonilla interrupta (Epi.)	2	45
Nemertina		
Nemertina	1	23
Phoronida		
Phoronis spp.	1	23
Number of Taxa w/ Epi.	39	
Number of Taxa w/o Epi.	26	
Total Count w/ Epi.	399	
Total Count w/o Epi.	271	
Total Abundance w/ Epi.		9068
Total Abundance w/o Epi.		6159